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(71)出願人 999999999

エルム工業株式会社

東京都葛飾区西新小岩 4 丁目21番22号

(72)発明者 柳瀬 芳之

東京都葛飾区西新小岩 4 丁目21番22号 エ

ルム工業株式会社内

(74)代理人 弁理士 杉山 泰三

審査官 神崎 孝之

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(54)【発明の名称】 接着テープ用卓上電動カッター器

1

【特許請求の範囲】

【請求項 1】 回転自在且つ着脱自在に取付けられた接着テープの装填ドラム (36) と、ドラム (36) に装填された接着テープを送出する電動送り部と、送出された分の接着テープを切り落す電動カッター部とを備えた接着テープ用卓上電動カッター装置に於て、側面の適宜個所に操作盤 (83) および配線基板 (84) を設け、操作盤 (83) にはミリ単位設定ボタン (85)、センチメートル単位設定ボタン (86)、設定寸法表示カウンター (87)、設定寸法送り指示ボタン (88)、自由寸法送りボタン (89)、自由寸法切断ボタン (90) を、また配線基板 (84) には抵抗器、コンデンサー、半導体素子などの所要電気素子 (91) …より構成された電気回路を夫々装備すると共に電動送り部の送りモータ (14) の回転軸 (15) に円周に小さい磁石 (95) が植め込まれた回転板 (9

2

6) が固定され、また回転板 (96) と対向する個所にセンサー (97) が取付けられ、更に上記の電気回路は設定寸法送り指示ボタン (88) に押し操作が加えられた際に於て回転板 (96) の回転により磁石 (95) がセンサー (97) の前を通過する回数と設定寸法表示カウンター (87) に設定表示された数値とが一致した時に送りモータ (14) の停止をなすと共に電動カッター部のカッター作動用モータ (59) が作動して一回の切断機能をなし、自由寸法送りボタン (89) に押し操作を加えている間中は送りを続け、自由寸法切断ボタン (89) に押し操作を加えた時に電動カッター部のカッター作動モータ (59) が作動して一回の切断機能をなすべく形成した接着テープのカッター部への送出口 (7) の後方に外周に環状の凹溝 (8) の多数数本が周設された前側および後側電動送りロール (9) (10) を、当該後側送りロールが

僅かに高い位置とされた配置および前後両側送りロール(9)(10)が互に凹溝(8)(8)内に嵌入された状態となして回転自在に軸承し、また前側送りロール

(9)の上方に外周に環状の凹溝(25)の多数本が周設され且つ当該凹溝(25)に前側送りロール(9)が嵌入された押着ロール(26)を回転自在に軸承しこの軸承孔を縦向きの長孔(27)として押着ロール(26)を上下動可能とすると共に当該押着ロール(26)の上方個所に張出壁(21)を設け、この張出壁(21)に縦軸(22)を上下に貫出した状態で回転自在および上下動可能に支承して上端に押圧強度調節用ツマミ(23)を同じく下端に両端が下方に折曲された横板(24)を夫々固着し、この横板(24)の両端折曲部(29)(29)'の下端で押着ロール(26)の中心軸(28)を押圧するようにし、また縦軸(22)に於て張出壁(21)の下面と横板(24)の上面との間に同縦軸(22)の押下用パネ(30)を捲装し、更に同縦軸(22)に於て張出壁(21)の上面より上の個所に横向ピン(31)を貫通して当該横向ピン(31)の両側を縦軸(12)の軸孔に於ける切縁の上面に上記の押下用パネ(30)の作用力により圧接させ、同切縁部の上面に高所部(32)および低所部(33)を設け高所部(32)に横向ピン(31)の両側が圧接する時には横板(24)の両端折曲部(29)(29)'が押着ロール(26)を少ない状態で同じく低所部(33)の時には多い状態で押下するようにしたことを特徴とする接着テープ用卓上電動カッター器。

【発明の詳細な説明】

〔産業上の利用分野〕

本発明は接着テープ用卓上電動カッター器に関する。

〔従来の技術〕

従来接着テープ用卓上電動カッターは定寸切りと自由寸法切りの機構を併せ有することはなく、また切断される接着テープの厚みに合わせてその送出口における送りロールへの押着ロールの下限の高さを調節する機構もこれを有することがなかった。

〔発明が解決しようとする問題点〕

従って旧来の接着テープ用卓上電動カッター器は定寸切りと自由切りの両様に供することを得ず使い勝手が頗る悪いのみならず接着テープの送出口にはテープの厚みに応じた複数の機種を用意するなどの面倒にして且つ不経済な対応を余義なくされるなどの問題点があった。

〔問題点を解決するための手段〕

本発明は回転自在且つ着脱自在に取付けられた接着テープの装填ドラム(36)と、ドラム(36)に装填された接着テープを送出する電動送り部と、送出された分の接着テープを切り落す電動カッター部とを備えた接着テープ用卓上電動カッター装置に於て、側面の適宜個所に操作盤(83)および配線基板(84)を設け、操作盤(83)にはミリ単位設定ボタン(85)、センチメートル単位設定ボタン(86)、設定寸法表示カウンター(87)、設定寸

法送り指示ボタン(88)、自由寸法送りボタン(89)、自由寸法切断ボタン(90)を、また配線基板(84)には抵抗器、コンデンサー、半導体素子などの所要電気素子(91)より構成された電気回路を夫々装備すると共に電動送り部の送りモータ(14)の回転軸(15)に円周に小さい磁石(95)が植め込まれた回転板(96)が固定され、また回転板(96)と対向する個所にセンサー(97)が取付けられ、更に上記の電気回路は設定寸法送り指示ボタン(88)に押し操作が加えられた際に於て回転板(96)の回転により磁石(95)がセンサー(97)の前を通過する回数と設定寸法表示カウンター(87)に設定表示された数値とが一致した時に送りモータ(14)の停止をなすと共に電動カッター部のカッター作用モータ(59)が作動して一回の切断機能をなし、自由寸法送りボタン(89)に押し操作を加えている間中は送りを続け、自由寸法切断ボタン(89)に押し操作を加えた時に電動カッター部のカッター作用モータ(59)が作動して一回の切断機能をなすべく形成した接着テープのカッター部への送出口(7)の後方に外周に環状の凹溝(8)の多数本が周設された前側および後側電動送りロール(9)(10)を、当該後側送りロールが僅かに高い位置とされた配置および前後両側送りロール(9)(10)が互に凹溝(8)(8)内に嵌入された状態となして回転自在に軸承し、また前側送りロール(9)の上方に外周に環状の凹溝(25)の多数本が周設され且つ当該凹溝(25)に前側送りロール(9)が嵌入された押着ロール(26)を回転自在に軸承しこの軸承孔を縦向きの長孔(27)として押着ロール(26)を上下動可能とすると共に当該押着ロール(26)の上方個所に張出壁(21)を設け、この張出壁(21)に縦軸(22)を上下に貫出した状態で回転自在および上下動可能に支承して上端に押圧強度調節用ツマミ(23)を同じく下端に両端が下方に折曲された横板(24)を夫々固着し、この横板(24)の両端折曲部(29)(29)'の下端で押着ロール(26)の中心軸(28)を押圧するようにし、また縦軸(22)に於て張出壁(21)の下面と横板(24)の上面との間に同縦軸(22)の押下用パネ(30)を捲装し、更に同縦軸(22)に於て張出壁(21)の上面より上の個所に横向ピン(31)を貫通して当該横向ピン(31)の両側を縦軸(12)の軸孔に於ける切縁の上面に上記の押下用パネ(30)の作用力により圧接させ、同切縁部の上面に高所部(32)および低所部(33)を設け高所部(32)に横向ピン(31)の両側が圧接する時には横板(24)の両端折曲部(29)(29)'が押着ロール(26)を少ない状態で同じく低所部(33)の時には多い状態で押下するようにしたことを特徴とする接着テープ用卓上電動カッター器を提供することによってこのような問題点を解決しようとするものである。

〔実施例〕

図に示す実施例は座盤(1)の上面に於ける前辺に前側

立壁(2)を同じく中央個所の両側に左側立壁(3)および右側立壁(3)'を、これ等左右両側立壁(3)(3)'の前辺縁が前側立壁(2)の後側に接する状態として夫々設けると共に左右両側立壁(3)(3)'の間に後下りの中間底(4)を張設することにより接着テープ(5)の装填凹部(6)を形成し、この装填凹部(6)の前壁に接着テープ(5)の送出口(7)を開設し、この送出口(7)の後方に外周に環状の凹溝(8)の多数本が周設された前側および後側送りロール(9)(10)を、当該後側送りロール(10)が僅かに高い位置とされた配置および前後両側送りロール(9)(10)が互に凹溝(8)(8)内に嵌入された状態となして回転自在に軸承し、これ等前後両側送りロール(9)(10)の中心軸を右側立壁(3)'の外側に貫出させて各貫出端に従動歯車(11)(12)を固定し、これ等両従動歯車(11)(12)を右側立壁(3)'の外側に遊転自在に軸承した伝達歯車(13)に嚙合させると共に上記の中間底(4)の下側に送り用モータ(14)を装備し、この送り用モータ(14)の回転軸(15)に駆動ピニオン(16)を固定して当該駆動ピニオン(16)と上記の伝達歯車(13)とを中間歯車(17)(18)(19)(20)を介して連結し、また前側立壁(2)の上辺縁に後方向きの張出壁(21)を突設し、この張出壁(21)に縦軸(22)を上下に貫出した状態で回転自在および上下動可能に支承して上端に押圧強度調節用ツマミ(23)を同じく下端に両端が下方に折曲された横板(24)を夫々固着すると共に上記の前側送りロール(9)の上方に外周に環状の凹溝(25)の多数本が周設され且つ当該凹溝(25)に前側送りロール(9)が嵌入された押着ロール(26)を、左右両側立壁(3)(3)'に開設された縦向きの長孔(27)を利用して上下動自在に軸承し、この押着ロール(26)の中心軸(28)の両端寄り個所を上記の横板(24)の両端折曲部(29)(29)'の下端で押圧するようにし、また縦軸(22)に於て張出壁(21)の下面と横板(24)の上面と間の個所に同縦軸(22)の押下用パネ(30)を捲装し、更に同縦軸(22)に於て張出壁(21)の上面より上の個所に横向ピン(31)を貫通して当該横向ピン(31)の両側を縦軸(22)の軸孔に於ける切縁の上面に上記の押下用パネ(30)の作用力により圧接させ、同切縁の上面に高所部(32)および低所部(33)を設け高所部(32)に横向ピン(31)の両側が圧接する時には横板(24)の両端折曲部(29)(29)'が押着ロール(26)を少ない状態で押下する同様に低所部(33)の時には多い状態で押下するようにすると共に上記の左右両側立壁(3)(3)'の後側の隅角縁に斜めの深い切込溝(35)(35)'を切設し、当該切込溝(35)(35)'に巻芯(5)'に巻かれた接着テープ(5)の装填ドラム(36)に於ける中心軸(37)の両端寄り部を抜去可能な落し込みにより遊転自在に嵌着し、また切込溝(35)(35)'の外側に長方形の左右両側板パネ(3

9)(39)'を配しこれ等左右両側板パネ(39)(39)'の下端部を左右両側立壁(3)(3)'にリベット(40)により止着して同板パネ(39)(39)'の上端部と切込溝(35)(35)'の底端部とを対向させると共に当該上端部に装填ドラム(36)の中心軸(37)の両端ピボット状部(41)(41)'が嵌着するピボット状軸受(42)(42)'と同ピボット状軸受(42)(42)'にピボット状部(41)(41)'を嵌着時および抜去時に案内する傾斜面(43)(44)とを設け、更に前側立壁(2)に於て接着テープ(5)の送出口(7)のまわりに囲い枠(46)を突設して後述するカッター装置(78)の装填部(47)を形成し、この装填部(47)の後側に上下揺動板(48)を配して其の基端を前側立壁(2)に支軸(49)により軸承し同じく先端に下方に押し下げる牽引パネ(50)を掛止すると共に当該上下揺動板(48)に於ける先端寄り個所の下側縁にカム(51)を同じく上側縁個所に前方向きのガイドピン(52)を立設し、このガイドピン(52)の先端を上記の装填部(47)内に縦向きの長孔(53)を介して貫出させ、また前側立壁(2)の下方個所の後側に周辺にクランクピン(55)が立設された大径平衡車(56)を取付板(57)を利用して軸着すると共に取付板(57)にカッター作動用モータ(59)を装着し、このカッター作動用モータ(59)の回転軸(60)にピニオン(61)を固着して当該ピニオン(61)と上記の大径平衡車(56)とを中間歯車(62)(63)(64)(65)を介して連結し、カッター作動用モータ(59)の回転によつてクランクピン(55)とカム(51)とが係合してガイドピン(52)を上下動するようにし、更にこれとは別個に上記の装填部(47)内に嵌合する後面が開放された扁平筐(67)を構成し、この扁平筐(67)の前壁の上半分個所に接着テープ(5)の吐出口(68)を開設すると共に当該扁平筐(67)の後面の下半分に後面版(69)を張着して同下半分を閉塞し、同じく上半分に下辺が切刃(70)とされた

## 1 形状

の固定刃(71)を固着し更に扁平筐(67)の中に上辺が切刃(72)とされた板形状の可動刃(73)を上下移動自在とし且つ左右のガイド壁(74)により左右移動を阻止した状態として装入すると共に当該可動刃(73)の前面と扁平筐(67)の前壁の内面との間に左右一対の波型板パネ(75)を挟入して可動刃(73)の後面に固定刃(71)の前面とを常に圧接の状態を維持するようにし、更に可動刃(71)の下辺部の中央個所に横長のガイド孔(76)を後面版(69)の中央個所に縦向きの長方形孔(77)を開設することによつてカッター装置(78)を構成し、このカッター装置(78)を上記の装填部(47)に引掛パネ(79)と引掛孔(80)の係合および係止爪(81)と係止孔(82)の係合により抜去自在に嵌着して上記のガイドピン(52)をガイド孔(76)に長方形孔(7

7) を介して遊嵌し、ガイドピン (52) の上昇で可動刃 (73) が切断機能を果すようにする。

更に、右側立壁 (3)' の外側に操作盤 (83) および配線基板 (84) を夫々設けて当該操作盤 (83) にはミリメートル単位設定ボタン (85)、センチメートル単位設定ボタン (86)、設定寸法表示カウンター (87)、設定寸法送り指示ボタン (88)、自由寸法送りボタン (89)、自由寸法切断ボタン (90) を、また配線基板 (84) には抵抗器、コンデンサー、半導体素子などの電気素子 (91) …を、上記の座盤 (1) の後面に電源コード (92) および電源入切スイッチ (93) を、中間底 (4) の下側にトランス (94) を夫々装備すると共に上記の送り用モータ (14) の回転軸 (15) に円周の一点に小さい磁石 (95) が植め込まれた回転板 (96) が固定され、また配線基板 (84) に於て回転板 (96) と対向する箇所にセンサー (97) を取付け、設定寸法送り指示ボタン (88) に押し操作を加えた時に送りを開始し、この開始により磁石 (95) がセンサー (97) の前を通過する回数と設定寸法表示カウンター (87) に設定表示された数値とが一致した時に送りを停止すると共にカッター作動用モータ (59) の作動により可動刃 (73) が切断機能をなし、また自由寸法送りボタン (89) に押し操作を加えている間中は送りを続け、更に自由寸法切断ボタン (89) に押し操作を加えた時には可動刃 (73) が切断機能をなす様に電気回路 (図示せず) が形成されたものである。

尚、図中 (99) は外筐、(100) は取付板、(101) はガイド用リブ、(102) は接着防止用ギザギザを示す。

#### 〔発明の作用〕

本発明は叙上の通りであるので、先ずミリメートル単位設定ボタン (85) およびセンチメートル単位設定ボタン (86) を操作して設定寸法表示カウンター (87) に所望の数値を表出したのち設定寸法送り指示ボタン (88) に操作を加えると送り用モータ (14) が回転を開始して回転板 (96) を回転させセンサー (97) で磁石 (95) の通過回数を計数すると共に同送り用モータ (14) が駆動ビニオン (16)、中間歯車 (17) (18) (19) (20)、伝達歯車 (13)、従動歯車 (11) (12) および前後両側送りロール (9) (10) を回転状態として接着テープ

(5) を送り始め、この送りを電気回路が上記の計数による数値と設定寸法表示カウンター (87) による表出数値との一致で送り用モータ (14) を停止するまで続け、この停止直後に同電気回路がカッター作動用モータ (59) の回転を指示してビニオン (61)、中間歯車 (62) (63) (64) (65) および大径平歯車 (56) を回転状態とするとクランクピン (55) がカム (51) に当接して上下揺動板 (48) を上方に揺動させ、この上方揺動でガイドピン (52) が可動刃 (73) を上昇して固定刃 (71) とで接着テープ (5) を切断すると共にクランクピン (55) がカム (51) および牽引パネ (50) と協動して上下揺動板 (48) を下方に揺動させ、この下方揺動でガイド

ピン (52) が可動刃 (73) を下降位置に戻すと同時に電気回路がカッター作動用モータ (59) を停止し、仍つて設定寸法表示カウンター (87) に表出した数値に相当する長さのテープ片を切り出し、また自由寸法送りボタン (89) に押し操作を加えて送り用モータ (14)、駆動ビニオン (16)、中間歯車 (17) (18) (19) (20)、伝達歯車 (13)、従動歯車 (11) (12) および前後両側送りロール (9) (10) を回転状態とすることにより接着テープ (5) を任意に所望の長さまで送り続けたのち自由寸法送りボタン (89) に対する押し操作を解除して当該接着テープ (5) の送りを停止すると共に自由寸法切断ボタン (90) に押し操作を加えるとカッター作動用モータ (59) が可動刃 (73) を上下に一往復させて停止し、仍つて上記の送り続け操作により送出した自由長さのテープ片を切り出すなどの用法に供し、また接着テープの送り出しに際しては押圧強度調節用ツマミ (23) に引き上げ操作および捻回操作を加えることによつて横向ピン (31) の両側が高所部 (32) に圧接するようにした時には横板 (24) の両端折曲部 (29) (29)' による押着ロール (26) の下限の高さが高くなり、また低所部 (33) に圧接するようにした時には低くなるものであつて、即ち厚手の接着テープの場合には上記の下限を高くし薄手の接着テープの場合には低くして使用すればよいものである。

#### 〔発明の効果〕

本発明は叙上の通りであるので、一つの機器を以て能く接着テープの定寸切りと自由寸法切りの両機能を果たし且つこの機能は同機器内の一つの繰り出し機構及びカッターを用いて行い得るものであつて構成が簡単であり、また接着テープの厚みの変化に対する送出口における対応は単に押圧強度調整用ツマミ (23) を前記のように操作すれば足りるのであつて、このような対応のために当該送出口の隙間の寸法を変えた複数の機種を用意する必要がなく、本発明はこれらによって前記の問題点を充分に解決することができる効果を奏するものである。

#### 〔図面の簡単な説明〕

図は本発明の実施例を示すものであつて、第1図は前方斜め上から見た一部切截斜視図、第2図は後方斜め上から見た一部切截斜視図、第3図は一部切截側面図、第4図は一部切截正面図、第5図はカッター装置の裏側から見た斜視図である。

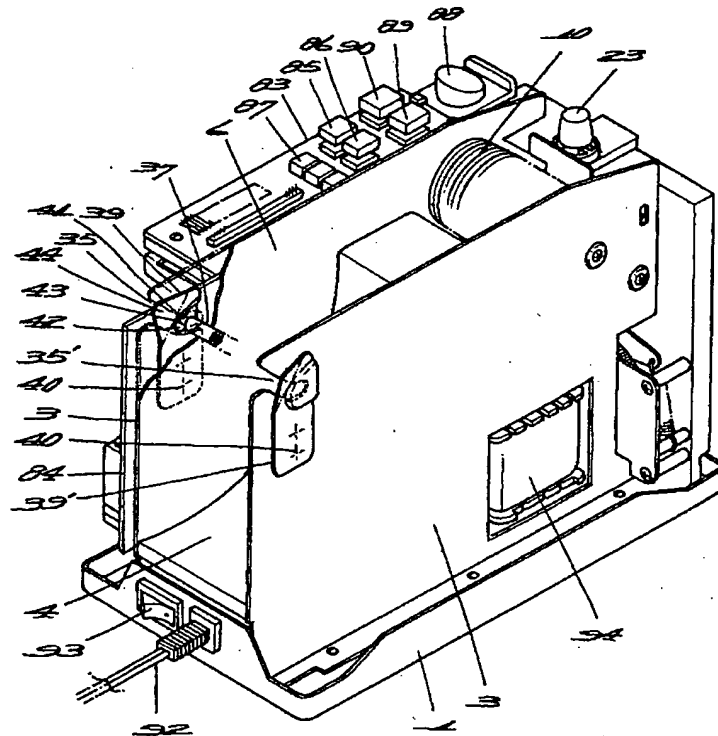
(1) ……座盤、(2) ……前側立壁、(3) ……左側立壁、(3)' ……右側立壁、(4) ……中間底、(5) ……接着テープ、(5)' ……巻芯、(6) ……装填凹部、(7) ……送出口、(8) ……凹溝、(9) ……前側送りロール、(10) ……後側送りロール、(11) (12) ……従動歯車、(13) ……伝達歯車、(14) ……送り用モータ、(15) ……回転軸、(16) ……駆動ビニオン、(17) (18) (19) (20) ……中間歯車、(21) ……張出壁、(22) ……縦軸、(23) ……押圧強

度調節用ツマミ、(24)……横板、(25)……凹溝、  
 (26)……押着ロール、(27)……長孔、(28)……中心軸、  
 (29) (29)'……折曲部、(30)……押下用バネ、(31)……  
 横向ピン、(32)……高所部、(33)……低所部、(35) (35)'……  
 切込溝、(36)……装填ドラム、(37)……中心軸、(39) (39)'……板バネ、  
 (40)……リベット、(41) (41)'……ピボット状部、(42) (42)'……  
 ピボット状軸受、(43) (44)……傾斜面、(46)……囲い枠、  
 (47)……装填部、(48)……上下揺動板、(49)……支軸、(50)……  
 牽引バネ、(51)……カム、(52)……ガイドピン、(53)……長孔、  
 (55)……クランクピン、(56)……大径平歯車、(57)……取  
 付板、(59)……カッター作動用モータ、(60)……回転軸、  
 (61)……ピニオン、(62) (63) (64) (65)……中間歯車、  
 (67)……扁平筐、(68)……吐出口、(69)……後面版、(70)……\*

\*……切刃、(71)……固定刃、(72)……切刃、(73)……  
 可動刃、(74)……ガイド壁、(75)……波形板バネ、  
 (76)……ガイド孔、(77)……長方形孔、(78)……カッター装置、  
 (79)……引掛バネ、(80)……引掛孔、(81)……係止爪、  
 (82)……係止孔、(83)……操作盤、(84)……配線基板、  
 (85)……ミリメートル単位設定ボタン、(86)……センチメートル単位設定ボタン、  
 (87)……設定寸法表示カウンター、(88)……設定寸法送り指示ボタン、  
 (89)……自由寸法送りボタン、(90)……自由寸法切断ボタン、  
 (91)……電気素子、(92)……電源コード、(93)……電源入切スイッチ、  
 (94)……トランス、(95)……磁石、(96)……回転板、  
 (97)……センサー、(99)……外筐、(100)……取付板、  
 (101)……ガイド用リブ、(102)……ギザギザ。

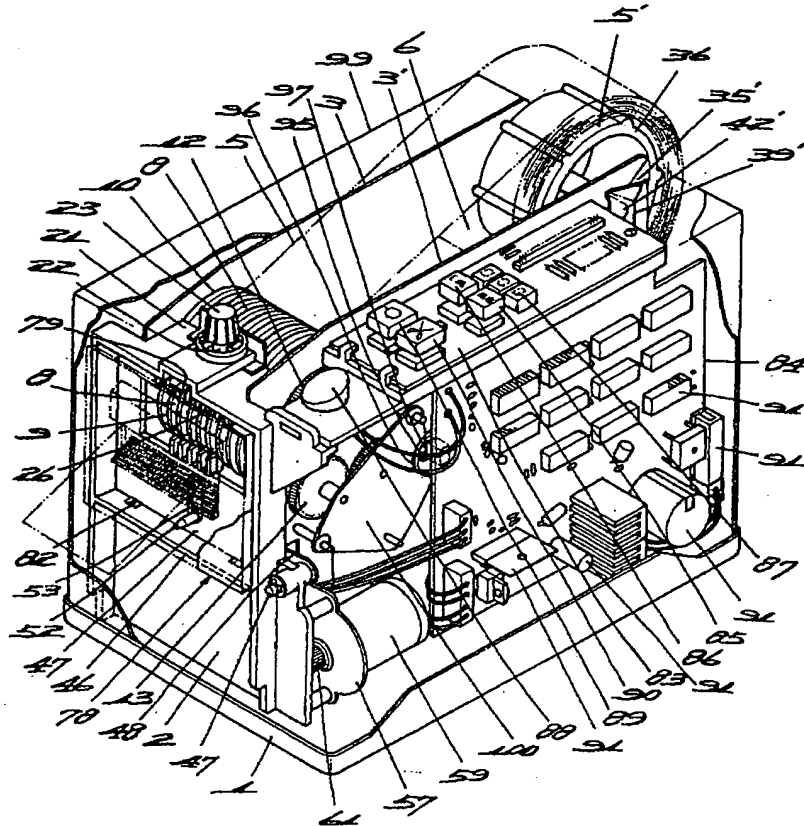
【第2図】

24 … 押圧強度調節用ツマミ  
 35/35' … 切込溝  
 37 … 中心軸  
 39/39' … 板バネ

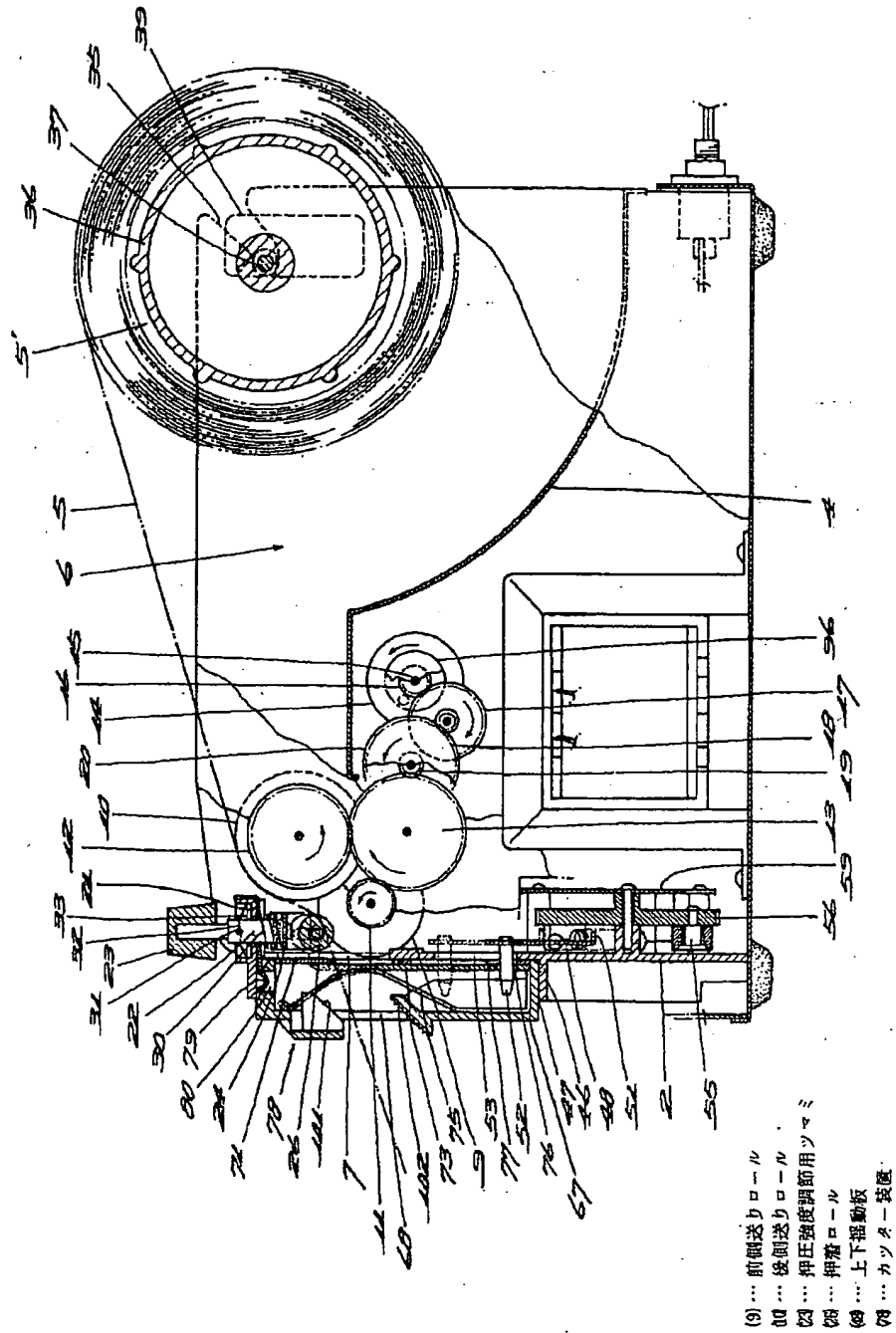


【第1図】

- (9) ... 前側送りロール  
 (10) ... 後側送りロール  
 (23) ... 押圧強度調節用ツマミ  
 (26) ... 押着ロール  
 (48) ... 上下揺動板  
 (78) ... カッター装置  
 (83) ... 操作盤  
 (97) ... センサー

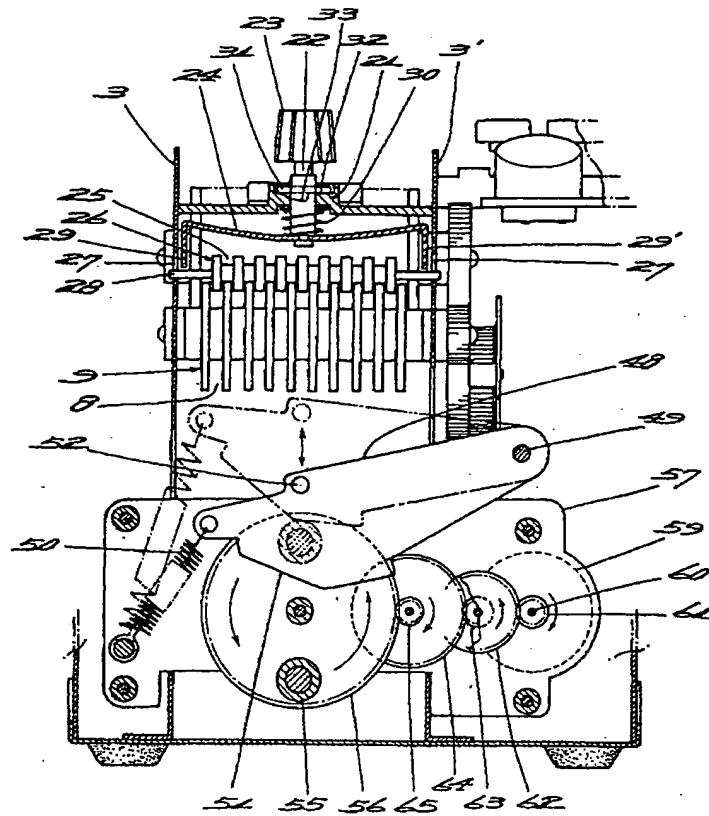


【第3図】

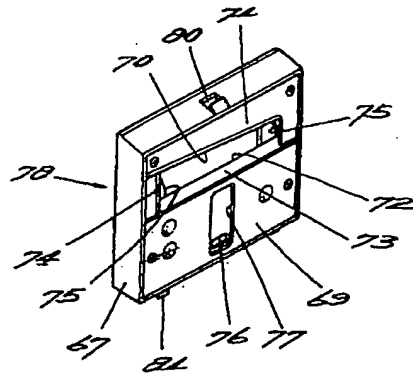


【第4図】

- 23 ... 押圧強度調節用ツマミ  
 26 ... 押着ロール  
 49 ... 上下揺動板



【第5図】



- 70... 固定刃
- 71... 可動刃
- 72... 波形板バネ
- 73... カッター装置

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CLAIMS

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[Claim(s)]

[Claim 1] The loading drum of the adhesive tape attached free [ a revolution ] and free [ attachment and detachment ] (36), In the desk electric cutter equipment for adhesive tape equipped with the electric delivery section which sends out the adhesive tape with which the drum (36) was loaded, and the electric cutter section which cuts off the sent-out adhesive tape of a part A control panel (83) and a wiring substrate (84) are formed in the proper part of a side face. To a control panel (83) A milli unit setup key (85), A cm unit setup-key (86) setting-out dimension display counter (87), a setting-out dimension -- a delivery directions carbon button (88) free dimension stepper-button (89) free dimension cutting carbon button (90) Moreover, while equipping a wiring substrate (84) with the electrical circuit which consisted of necessary electric element [ such as a resistor, a capacitor, and a semiconductor device, ] (91) --, respectively, \*\*\*\*\* rare \*\*\*\*\* (96) is fixed to the revolving shaft (15) of the delivery motor (14) of the electric delivery section for a small magnet (95) by the periphery. A sensor (97) in a rotor plate (96) and the part which counters Moreover, a mounting eclipse, When push actuation is added to a setting-out dimension delivery directions carbon button (88), the above-mentioned electrical circuit furthermore, by revolution of a rotor plate (96) When \*\*\*\* by which it was indicated by setting out is in agreement with the count and setting-out dimension display counter (87) with which a magnet (95) passes through a sensor (97) front, while suspending a delivery motor (14), the motor for cutter actuation of the electric cutter section (59) operates. One cutting function Nothing, Delivery is continued while adding push actuation to the free dimension stepper button (89). When push actuation is added to a free dimension cutting carbon button (89), the cutter actuation motor (59) of the electric cutter section operates. Before it forms in order to make one cutting function, and a majority of several zonate spot-like concaves (8) are attached behind sending-out opening (7) to the cutter section of adhesive tape again at a periphery, a side and a backside electric delivery roll (9), and (10) The arrangement to which the backside delivery roll concerned was considered as the slightly high location and an order both-sides delivery roll (9), and (10) will be in the condition of having been inserted in a concave (8) and (8) to \*\*, and they will make the bearing of the revolution free to it. The bearing of the revolution of the \*\* arrival roll (26) with which the a large number book of a zonate spot-like concave (25) was attached above the before side delivery roll (9) at the periphery, and the before side delivery roll (9) was inserted in the concave (25) concerned is made free. This bearing hole moreover, as a longitudinal long hole (27) While enabling vertical movement of a \*\* arrival roll (26), an overhang wall (21) is prepared in the upper part part of the \*\* arrival roll (26) concerned. The side (24) by which it supported free [ a revolution ] and possible [ vertical movement ] where an axis of ordinate (22) is \*\*\*\*(ed) up and down in this overhang wall (21), and ends were similarly caudad bent by the upper bed in the knob for press on-the-strength accommodation (23) in the soffit is fixed, respectively. The medial axis (28) of a \*\* arrival roll (26) is pressed in the soffit of the ends bending section (29) of this side (24), and (29) ' . Moreover, the spring for depressions (30) of this axis of ordinate (22) is \*\*\*\*(ed) between the underside of an overhang wall (21), and the top face of a side (24) in an axis of ordinate (22). Furthermore, penetrate a sideways pin (31) in the part above the top face of an overhang wall (21) in this axis of ordinate (22), and the top face of the margo incisalis in the boss of an axis of ordinate (12) is made to carry out the pressure welding of the both sides of the sideways pin (31) concerned according to the applied force of the above-mentioned spring for depressions (30). On the top face of this OFF edge, the height section (32) and low \*\*\*\* (33) Desk [ for the adhesive tape characterized by carrying out the depression of the \*\* arrival roll (26) in many condition same in few condition at the time of low \*\*\*\* (33) ] electric [ the ends bending section (29) of a side (24), and (29) ' ] cutter machine when it prepares and the both sides of a sideways pin (31) carry out a pressure welding to the height section (32).

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[Translation done.]

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DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[Industrial Application]

This invention relates to the desk electric cutter machine for adhesive tape.

[Description of the Prior Art]

Conventionally, the desk electric cutter for adhesive tape combined the device of constant \*\*\*\*\* and the free dimension end, and the device in which the height of the minimum of the \*\* arrival roll to the delivery roll in the sending-out opening was adjusted according to the thickness of the adhesive tape had and cut did not have this, either.

[Problem(s) to be Solved by the Invention]

Therefore, the conventional desk electric cutter machine for adhesive tape had troubles -- make it the trouble of preparing two or more models which did not acquire presenting both the appearance of constant \*\*\*\*\* and the free end, but it is not only very user-unfriendly, but responded to the thickness of a tape at sending-out opening of adhesive tape, and \*\*\*\* makes an uneconomical response there be nothing.

[Means for Solving the Problem]

This invention is with the loading drum (36) of the adhesive tape attached free [ a revolution ] and free [ attachment and detachment ], In the desk electric cutter equipment for adhesive tape equipped with the electric delivery section which sends out the adhesive tape with which the drum (36) was loaded, and the electric cutter section which cuts off the sent-out adhesive tape of a part A control panel (83) and a wiring substrate (84) are formed in the proper part of a side face. To a control panel (83) A milli unit setup key (85), A cm unit setup-key (86) setting-out dimension display counter (87), a setting-out dimension -- a delivery directions carbon button (88) free dimension stepper-button (89) free dimension cutting carbon button (90) Moreover, while equipping a wiring substrate (84) with the electrical circuit which consisted of necessary electric element [ , such as a resistor, a capacitor, and a semiconductor device, ] (91) --, respectively, \*\*\*\*\* rare \*\*\*\*\* (96) is fixed to the revolving shaft (15) of the delivery motor (14) of the electric delivery section for a small magnet (95) by the periphery. A sensor (97) in a rotor plate (96) and the part which counters Moreover, a mounting eclipse, When push actuation is added to a setting-out dimension delivery directions carbon button (88), the above-mentioned electrical circuit furthermore, by revolution of a rotor plate (96) When \*\*\*\* by which it was indicated by setting out is in agreement with the count and setting-out dimension display counter (87) with which a magnet (95) passes through a sensor (97) front, while suspending a delivery motor (14), the motor for cutter actuation of the electric cutter section (59) operates. One cutting function Nothing, Delivery is continued while adding push actuation to the free dimension stepper button (89). When push actuation is added to a free dimension cutting carbon button (89), the cutter actuation motor (59) of the electric cutter section operates. Before it forms in order to make one cutting function, and a majority of several zonate spot-like concaves (8) are attached behind sending-out opening (7) to the cutter section of adhesive tape again at a periphery, a side and a backside electric delivery roll (9), and (10) The arrangement to which the backside delivery roll concerned was considered as the slightly high location and an order both-sides delivery roll (9), and (10) will be in the condition of having been inserted in a concave (8) and (8) to \*\*, and they will make the bearing of the revolution free to it. The bearing of the revolution of the \*\* arrival roll (26) with which the a large number book of a zonate spot-like concave (25) was attached above the before side delivery roll (9) at the periphery, and the before side delivery roll (9) was inserted in the concave (25) concerned is made free. This bearing hole moreover, as a longitudinal long hole (27) While enabling vertical movement of a \*\* arrival roll (26), an overhang wall (21) is prepared in the upper part part of the \*\* arrival roll (26) concerned. The side (24) by which it supported free [ a revolution ] and possible [ vertical movement ] where an axis of ordinate (22) is \*\*\*\*(ed) up and down in this overhang wall (21), and ends were similarly caudad bent by the upper bed in the knob for press on-the-strength accommodation (23) in the soffit is fixed, respectively. The medial axis (28) of a \*\* arrival roll (26) is pressed in the soffit of the ends bending section

(29) of this side (24), and (29) '. Moreover, the spring for depressions (30) of this axis of ordinate (22) is \*\*\*\*(ed) between the underside of an overhang wall (21), and the top face of a side (24) in an axis of ordinate (22). Furthermore, penetrate a sideways pin (31) in the part above the top face of an overhang wall (21) in this axis of ordinate (22), and the top face of the margo incisalis in the boss of an axis of ordinate (12) is made to carry out the pressure welding of the both sides of the sideways pin (31) concerned according to the applied force of the above-mentioned spring for depressions (30). On the top face of this OFF edge, the height section (32) and low \*\*\*\* (33) When it prepares and the both sides of a sideways pin (31) carry out a pressure welding to the height section (32), the ends bending section (29) of a side (24) and (29) ' a \*\* arrival roll (26) in few condition so that a depression may be carried out in many same condition at the time of low \*\*\*\* (33) It is going to solve such a trouble by offering the desk electric cutter machine for adhesive tape characterized by carrying out.

[Example]

While the example shown in drawing similarly prepares a before side standing wall (2) in the both sides of a central part the front side in the top face of a seat disc (1), respectively as a condition that the verge before right-and-left both-sides standing walls (3), such as this, and (3) ' touches the backside [ a before side standing wall (2) ] in left-hand side standing wall (3) and right-hand side standing wall (3) ' The loading crevice (6) of adhesive tape (5) is formed by stretching the medium bottom (4) from which it gets down the back between right-and-left both-sides standing wall (3) and (3) '. Sending-out opening (7) of adhesive tape (5) is established to the front wall of this loading crevice (6). Before the a large number book of a zonate spot-like concave (8) is attached behind this sending-out opening (7) at a periphery, a side and a backside delivery roll (9), and (10) The arrangement to which the backside delivery roll (10) concerned was considered as the slightly high location and an order both-sides delivery roll (9), and (10) will be in the condition of having been inserted in a concave (8) and (8) to \*\*, and they will make the bearing of the revolution free to it. Make the medial axis of order both-sides delivery rolls (9), such as this, and (10) \*\*\*\* on the outside of right-hand side standing wall (3) ', and a collar gear (11) and (12) are fixed to each \*\*\*\*\*. While making it gear with the transfer gearing (13) which made free the bearing of the idling of both collar gears (11), such as this, and (12) to the outside of right-hand side standing wall (3) ', the above-mentioned medium bottom (4) bottom is equipped with the motor for delivery (14). Fix a drive pinion (16) to the revolving shaft (15) of this motor for delivery (14), and the above-mentioned transfer gearing (13) is connected with the drive pinion (16) concerned through an intermediate gear (17), (18), (19), and (20). Moreover, the overhang wall (21) of the back sense is protruded on the top chord edge of a before side standing wall (2). While fixing the side (24) by which it supported free [ a revolution ] and possible [ vertical movement ] where an axis of ordinate (22) is \*\*\*\*(ed) up and down in this overhang wall (21), and ends were similarly caudad bent by the upper bed in the knob for press on-the-strength accommodation (23) in the soffit, respectively The \*\* arrival roll (26) with which the a large number book of a zonate spot-like concave (25) was attached above the before [ the above ] side delivery roll (9) at the periphery, and the before side delivery roll (9) was inserted in the concave (25) concerned The bearing of the vertical movement is made free using the longitudinal long hole (27) established by right-and-left both-sides standing wall (3) and (3) '. The ends approach part of the medial axis (28) of this \*\* arrival roll (26) is pressed in the soffit of the ends bending section (29) of the above-mentioned side (24), and (29) '. Moreover, the spring for depressions (30) of this axis of ordinate (22) is \*\*\*\*(ed) in an axis of ordinate (22) in the underside of an overhang wall (21), the top face of a side (24), and the part of a between. Furthermore, penetrate a sideways pin (31) in the part above the top face of an overhang wall (21) in this axis of ordinate (22), and the top face of the margo incisalis in the boss of an axis of ordinate (12) is made to carry out the pressure welding of the both sides of the sideways pin (31) concerned according to the applied force of the above-mentioned spring for depressions (30). On the top face of this margo incisalis, the height section (32) and low \*\*\*\* (33) So that the ends bending section (29) of a side (24) and (29) ' may push a \*\* arrival roll (26) in few condition and may carry out a depression in many same condition at the time of low \*\*\*\* (33), when it prepares and the both sides of a sideways pin (31) carry out a pressure welding to the height section (32) Then, a deep slanting cut slot (35) and (35) ' are both \*\*\*\*(ed) on the buttock edge on the backside [ the above-mentioned right-and-left both-sides standing wall (3) and (3) ' ]. It attaches free [ idling ]. extraction is possible in the ends approach section of the medial axis (37) in the loading drum (36) of the adhesive tape (5) wound around the cut slot (35) concerned and (35) ' at winding core (5) ' -- dropping -- A rectangular right-and-left both-sides flat spring (39) and (39) ' are allotted to the outside of cut slot (35) and (35) '. The soffit section of right-and-left both-sides flat springs (39), such as this, and (39) ' to right-and-left both-sides standing wall (3) and (3) ' moreover, with a rivet (40) While attaching firmly and making the upper bed section of this flat-spring (39) and (39) ', and the bottom edge of cut slot (35) and (35) ' counter Pivot-like section (41) and (41) ' to pivot-like bearing (42) and (42) ' and said pivot-like bearing (42) and (42) ' which the ends pivot-

like section (41) of the radial axis (37) of a loading drum (36) and ( ) attach in the upper bed section concerned. At the time of attachment, prepare the inclined plane (43) shown at the time of extraction, and (44), and the loading section (47) of the cutter equipment (78) which protrudes and mentions an enclosure frame (46) later around sending-out opening (7) of adhesive tape (5) in a before side standing wall (2) further is formed. While hanging the towage spring (50) which arranges a vertical splash plate (48) on the backside [ this loading section (47) ], carries out the bearing of that end face to a before side standing wall (2) by the pivot (49), and is similarly caudad depressed at a head. Set up a cam (51) on the bottom edge of the head approach part in the vertical splash plate (48) concerned, and, similarly the guide pin (52) of the front sense is set up in an upside marginal part. The head of this guide pin (52) is made to \*\*\*\* through a longitudinal long hole (53) in the above-mentioned loading section (47). Moreover, while fixing to revolve the major-diameter spur gear (56) with which the crank pin (55) was set up on the outskirts at the backside [ the lower part part of a before side standing wall (2) ] using a tie-down plate (57), a tie-down plate (57) is equipped with the motor for cutter actuation (59). Fix a pinion (61) to the revolving shaft (60) of this motor for cutter actuation (59), and the pinion (61) concerned and the above-mentioned major-diameter spur gear (56) are connected with it through an intermediate gear (62), (63), (64), and (65). Therefore a crank pin (55) and a cam (51) engage with a revolution of the motor for cutter actuation (59), and a guide pin (52) is made to move up and down. Furthermore, flat \*\* (67) by which the rear face which fits in in the above-mentioned loading section (47) separately from this was opened is constituted. While establishing the delivery (68) of adhesive tape (5) in the upper half part of the front wall of this flat \*\* (67), the rear-face version (69) was stretched in the lower half of the rear face of the flat \*\* (67) concerned, this lower half was blockaded, and similarly the lower side was used as the cutting edge (70) in the upper half. ] 形状

While inserting in as a condition which enabled vertical migration of the movable cutting edge (73) of a plate configuration with which \*\*\*\*\* (71) was fixed and the top chord was further used as the cutting edge (72) into flat \*\* (67), and prevented left right translation with the guide wall (74) on either side. Carry out \*\* ON of the wave template spring (75) of a left Uichi pair between the front face of the movable cutting edge (73) concerned, and the inner surface of the front wall of flat \*\* (67), and the condition of a pressure welding is always maintained for the front face of a stationary knife (71) on the rear face of a movable cutting edge (73). Furthermore, therefore, cutter equipment (78) is constituted to establish a longitudinal rectangle hole (77) for an oblong guide hole (76) in the central part of the lower edge part of a movable cutting edge (71) in the central part of the rear-face version (69). Attach this cutter equipment (78) in the above-mentioned loading section (47) free [ extraction ] by engagement of a connection spring (79) and a connection hole (80), and engagement of a stop pawl (81) and a stop hole (82), and the above-mentioned guide pin (52) is fitted loosely into a guide hole (76) through a rectangle hole (77). A movable cutting edge (73) achieves a cutting function by lifting of a guide pin (52).

A control panel (83) and a wiring substrate (84) are formed in the outside of right-hand side standing wall (3) ', respectively. To the control panel (83) concerned. Furthermore, millimeter unit setup-key (85), A cm unit setup-key (86) setting-out dimension display counter (87), a setting-out dimension -- a delivery directions carbon button (88) free dimension stepper-button (89) free dimension cutting carbon button (90) moreover -- while equipping the rear face of the above-mentioned seat disc (1) with a power cord (92) and a power-source ON OFF switch (93) and equipping a wiring substrate (84) with a transformer (94) for electric element [ , such as a resistor, a capacitor, and a semiconductor device, ] (91) -- at the medium bottom (4) bottom, respectively \*\*\*\*\* rare \*\*\*\*\* (96) is fixed to the revolving shaft (15) of the above-mentioned motor for delivery (14) for the magnet (95) of a periphery small to one point. Moreover, a sensor (97) is attached in a rotor plate (96) and the part which counters in a wiring substrate (84). Delivery is started when push actuation is added to a setting-out dimension delivery directions carbon button (88). When \*\*\*\* by which it was indicated by setting out is in agreement with the count and setting-out dimension display counter (87) at which a magnet (95) passes through a sensor (97) front by this initiation, while stopping delivery, a movable cutting edge (73) a cutting function by actuation of the motor for cutter actuation (59). Nothing, Moreover, while adding push actuation to the free dimension stepper button (89), when delivery is continued and push actuation is further added to a free dimension cutting carbon button (89), an electrical circuit (not shown) is formed so that a movable cutting edge (73) may make a cutting function.

In addition, among drawing, in outside \*\* and (100), a tie-down plate and (101) show the rib for a guide, and (102) shows [ (99) ] the notch for adhesion prevention.

[Function of the Invention]

In this invention, since it is as above-stated Millimeter unit setup-key (85) and a cm unit setup key (86) are operated first. If actuation is added to a setting-out dimension delivery directions carbon button (88) after

expressing desired \*\*\*\* at a setting-out dimension display counter (87), the motor for delivery (14) will start a revolution. While rotating a rotor plate (96) and carrying out counting of the magnetic (95) count of passage by the sensor (97), the motor for the said delivery (14) A drive pinion (16), An intermediate gear (17), (18), (19), (20), a transfer gearing (13), a collar gear (11), (12), and an order both-sides delivery roll (9) and (10) are made into a revolution condition. Adhesive tape (5) The start of delivery, It continues until it suspends the motor for delivery (14) by coincidence with \*\*\*\* according this delivery to counting of the above [ an electrical circuit ], and the number \*\* of expressions by the setting-out dimension display counter (87). This electrical circuit directs a revolution of the motor for cutter actuation (59) immediately after this halt. A pinion (61), When an intermediate gear (62), (63), (64), (65), and a major-diameter spur gear (56) are made into a revolution condition, a crank pin (55) makes a vertical splash plate (48) rock up in contact with a cam (51). While a guide pin (52) besides goes up a movable cutting edge (73) with a way splash and cutting adhesive tape (5) by the stationary knife (71), a crank pin (55) cooperates with a cam (51) and a towage spring (50), and a vertical splash plate (48) is made to rock caudad. An electrical circuit suspends the motor for cutter actuation (59) at the same time a guide pin (52) returns a movable cutting edge (73) to a downward location with this lower part splash. The tape piece of the die length which is equivalent to a \*\*\*\*\* setting-out dimension display counter (87) at the number \*\* of \*\*\*\*\* is started. Moreover, push actuation is added to a free dimension stepper button (89), and the motor for delivery (14), a drive pinion (16), an intermediate gear (17), (18), (19), (20), a transfer gearing (13), a collar gear (11), (12), and an order both-sides delivery roll (9) and (10) are made into a revolution condition. The sake, After continuing sending adhesive tape (5) to arbitration to the desired die length, while canceling the push actuation to a free dimension stepper button (89) and stopping delivery of the adhesive tape (5) concerned If push actuation is added to a free dimension cutting carbon button (90), the motor for cutter actuation (59) will make a movable cutting edge (73) restored once up and down, and will stop. Direction for use, such as starting the tape piece of the free die length which the above continued sending as \*\* and was sent out by actuation, is presented. Moreover, so that the both sides of a sideways pin (31) may therefore carry out a pressure welding to adding raising actuation and twisting actuation to the knob for press on-the-strength accommodation (23) on the occasion of the send of adhesive tape at the height section (32) When it carries out, the height of the minimum of the \*\* arrival roll (26) by the ends bending section (29) of a side (24) and (29) ' becomes high. Moreover, what is necessary is in the case of the adhesive tape of \*\*\*\*\*, i.e., thick, to make it high, to become low and just to use the above-mentioned minimum in the case of thin adhesive tape, making it low, when it is made to carry out a pressure welding to low \*\*\*\* (33).

[Effect of the Invention]

since this invention is as above-stated -- one device -- with, the thing which achieves both the functions of constant \*\*\*\*\* of \*\*\*\* adhesive tape, and the free dimension end, and can perform this function using one delivery device and cutter in this device -- it is If the knob for press on-the-strength adjustment (23) is only operated as mentioned above, it is sufficient for the response in sending-out opening to change of the thickness of adhesive tape, it is not necessary to prepare two or more models which changed the dimension of the clearance between the sending-out openings concerned for such a response, and a configuration is easy, and it is and this invention does so the effectiveness which can fully solve the aforementioned trouble by these.

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[Translation done.]

\* NOTICES \*

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1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

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DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]

the part which drawing shows the example of this invention and looked at \*\*\*\*\* and drawing 1 from front slant -- a \*\*\*\* perspective view and drawing 2 were seen from back slant -- it is the perspective view as which a \*\*\*\* perspective view and drawing 3 looked at the \*\*\*\* side elevation, and a part of drawing [ a part of ] 4 looked at a \*\*\*\* front view and drawing 5 from the background of cutter equipment a part.

(1) .... A seat disc, (2) .. A before side standing wall, (3) .. A left-hand side standing wall, (3) ' [ .. Right-hand side standing wall, ] (4) .... A medium bottom, (5) .. Adhesive tape, (5) ' .. A winding core, (6) [ .. Loading crevice, ] (7) .... Sending-out opening, (8) .. A concave, (9) .. A before side delivery roll, (10) [ .. Backside delivery roll, ] (11), (12) .... A collar gear, (13) .. A transfer gearing, (14) .. The motor for delivery, (15) .... A revolving shaft, (16) .. A drive pinion, (17), (18), (19), (20) .. Intermediate gear, (21) .... An overhang wall, (22) .. An axis of ordinate, (23) .. The knob for press on-the-strength accommodation, (24) .... A side, (25) .. A concave, (26) .. A \*\* arrival roll, (27) [ .. Long hole, ] (28) .... A medial axis, (29) and (29) ' .. The bending section, (30) .. The spring for depressions, (31) .... A sideways pin, (32) .. The height section, (33) .. Low \*\*\*\*, (35) (35) ' .... A cut slot, (36) .. A loading drum, (37) [ .. Medial axis, ] (39) (39) ' .... A flat spring, (40) .. A rivet, (41) and (41) ' [ .. Pivot-like section, ] (42) (42) ' .... Pivot-like bearing, (43), (44) .. Inclined plane, (46) .... An enclosure frame, (47) .. The loading section, (48) .. Vertical splash plate, (49) .... A pivot, (50) .. A towage spring, (51) .. A cam, (52) [ .. Guide pin, ] (53) .... A long hole, (55) .. A crank pin, (56) .. Major-diameter spur gear, (57) .... A tie-down plate, (59) .. The motor for cutter actuation, (60) .. Revolving shaft, (61) .... A pinion, (62), (63), (64), (65) .. Intermediate gear, (67) .... Flat \*\*, (68) .. A delivery, (69) .. The rear-face version, (70) [ .. Cutting edge, ] (71) .... A stationary knife, (72) .. A cutting edge, (73) .. A movable cutting edge, (74) [ .. Guide wall, ] (75) .... A corrugated plate spring, (76) .. A guide hole, (77) .. Rectangle hole, (78) .... Cutter equipment, (79) .. A connection spring, (80) .. Connection hole, (81) .... A stop pawl, (82) .. A stop hole, (83) .. A control panel, (84) [ .. Wiring substrate, ] (85) .... A millimeter unit setup key, (86) .. Cm unit setup key, (87) .... A setting-out dimension display counter, (88) .. Setting-out dimension delivery directions carbon button, (89) .... A free dimension stepper button, (90) .. Free dimension cutting carbon button, (91) .... An electric element, (92) .. A power cord, (93) .. Power-source ON OFF switch, (94) .... a transformer and (95) .. a magnet and (96) .. a rotor plate and (97) .. a sensor and (99) .. outside \*\* and .. (100) -- a tie-down plate and .. (101) -- the rib for a guide, and .. (102) -- notched.

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[Translation done.]